



A STUDY ON DIVERSITY OF BUTTERFLIES IN CHIKHLI REGION OF BULDANA DISTRICT.(M. S.) INDIA

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ABSTRACT

The present study was conducted on diversity of butterflies in Chikhli region of Buldana district Maharashtra India. The study was carried out from Aug. 2015 to Dec. 2015 in the College campus and periphery of Chikhli region. A total 15 species of butterflies and belonging to 5 families were recorded during study period. Nymphalidae is the richest family and Hesperidae is least found family. The seasonal Pattern marks the more number of butterfly, The food availability is also abundant in specific seasons. The study areas are rich in butterfly diversity and rich with food sources of Butterfly.

KEYWORDS: Biodiversity, Butterfly, Lepidoptera.

INTRODUCTION:

Butterflies occupy a vital position in ecosystems and their occurrence and diversity are considered as good indicators of health of any given terrestrial biotope. As herbivorous insects, the distribution of larval and nectar host plant has a distinct impact on the status of butterfly diversity. Butterflies and moths belong to the order-Lepidoptera of insecta. Many species are strictly seasonal, preferring set of habitats. In spite of this, butterflies have been generally neglected by community ecologist and there are very few studies available on their community structure, population dynamic and the eco climatic factor which affect them. Being good indicator of climatic condition as well as seasonal and ecological changes, they can serve in formulating strategies for conservation. However they have largely been ignored by conservation biologists and policy-makers as well. It is hence encouraged that butterfly are now being induce in biodiversity studies and biodiversity conservation. The present study was started with a view to examine the dynamics of butterfly population across seasons and habitats. The quantitative data on butterfly diversity gathered from a two spots. But their are questions how the butterfly diversity is fluctuating. The diversity studies threw light on such fluctuations.

The present analysis is intended to reveal the seasonal patterns in butterfly populations, and interactions among them, the plants on which they depend, and their ecoclimate. Despite its limitations, this work aimed to study the butterfly diversity.

The biosphere constitutes a vital life support system for man and its existence of human race. There are well over one million known species of insects in the world and some experts estimate that there might be as many as 10 million. Lepidoptera is a very large order that includes some of the most beautiful species and some of the most economically important pests in the class Insecta. Many schemes of classification exist for the Lepidoptera. Some divide the order into five suborders. A more informal method divides the order into the Microlepidoptera and the Macrolepidoptera according to average body size of the included species. Another informal scheme divides the Lepidoptera into moths, butterflies, and skippers. A butterfly is a mainly day-flying insect of the order Lepidoptera, which includes the butterflies and moths. Like other holometabolous insects, the butterflies life cycle consist of four parts egg, larva, pupa and adult. Most species are diurnal. Butterflies have large, often brightly coloured wings and conspicuous, fluttering flight. Butterflies comprise the true butterflies (superfamily Papilionoidea), the skippers (superfamily Hesperioidea)

REVIEW OF LITERATURE:

Insects are sensitive to any change in their habitat and are considered as Biological

Indicators (Chakravarthy et. Al. 2005). Thus the butterfly diversity indicates good picture of the ecosystem. Hence the present study has been undertaken. The diversity of species is related with the availability of food plants in surrounding (Kunte 2000), Patwardhan and Kurve (2008) carried out preliminary study of butterfly diversity from Thane. Kunte et. al. (2012) studied diversity of butterflies from Meghalaya. Bubesh et. al. (2012) studied butterflies of Seshachlam biosphere reserve of Andhra Pradesh.

MATERIALS & METHODS:

The present study was conducted in the area of college campus having area of 18 acres and periphery of Chikhli town. Th Chikhli is located at 20.030N 75.780E. The climate is cool and not so hot as compare to Vidharbh region. The annual rain fall averages 800ml. The biodiversity of butterflies was study from August 2015 to December 2015. The butterflies were observed from morning to evening during study period. The study area was also full of various types of the flowering plants. some Fruity trees are also present. Butterflies picture were captured from this site. The spot 2 area has flowering plant and some other plants. The climate in Chikhli region is suitable for Butterflies. The survey method was used to capture the picture of good quality butterflies from 2 spots. The picture were captured by DIGITAL SINGAL LENSE CAMERA (DSLR). And some by mobile camera also. As the number of butterflies are decreasing and as per the law of Indian Government not to kill animals for any purpose. Hence just a picture of butterfly was taken without harming them and collect or preserve those flies which are found death on the spots. Identification of butterfly-The Photographs of butterfly and some death specimen found on area were collected for identification. Colour pattern, Shape and size, as well as designs were consider for identification. All Photographs and Specimen was identified by Z.S.I. WRC Pune-44. The scan copy of identification report is provided below.

RESULTS & DISCUSSION:

Kunte et al. (2012) studies butterflies of Garro hills of Meghalaya. Krushnamegh (1997) studied seasonal pattern in butterfly abundance. In the present work butterflies were marked their abundance in seasonal pattern. Singh and Chib (2014) reported preliminary check list of butterflies. The checklist of species of butterfly found and identify in study area is given in (Table no. 1). The result show that total 15 species of butterfly belonging to 5 families were recorded in Chikhli region study area. Nymphalidae was richest family in study area that consist total 08 species that is 56% species of butterfly followed by Papilionidae with 02 species that is 17% species. Lycaenidae with 02 species that is 13% species. Pieridae with 2 species that is 8% and Hesperidae with 1 species that is 4%. Pick activities of Butterfly are found during the month of September.

Sr.No.	Family	Scientific Name	Common name	Available %
1	Papilionidae	Graphium Agamemnon	Tailed jay	17
		Papilio Polytes	Common mormon	
2	Pieridae	Catopsilia Pomona	Common emigrant	8
		Catopsilia Pyranthe	Mottled emigrant	
3	Nymphalidae	Melititis leda	Common evening brown	56
		Acraea Terpsicore	Tawny coster	
		Phalanta phalanta	Common leopard	

		Euthalia Aconthea	Common baron	
		Neptis Hylas	Common sailer	
		Ariadne Ariadne	Angled castor	
		Junonia Lemonias	Lemon pancy	
		Junonia Hiarta	Yellow pancy	
4	Lycaenidae	Talica Nyseus	Red pierrot	13
		Catochrysops Strabo	Forget-me-not	
5	Hesperiidae	Udaspes Folus	Grass demon	4

CONCLUSION:

In the present investigation results obtained from the study on butterfly diversity in Chikhli region, show that Nymphalidae family was most abundant and percentage of species of butterfly is highest among all the family. The present study help creating awareness about the conservation of habitats of butterflies among the local people.

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